Microtextures of ternary feldspar in garnet-bearing felsic gneiss from the Mt. Riiser-Larsen in Napier Complex, East Antarctica

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Ternary feldspars in Garnet-bearing felsic gneiss from the Mt. Riiser Larsen in Napier Complex, East Antarctica have the characteristic exsolution lamellae. Although the metamorphic temperature was estimated from the re-integrated chemical composition of ternary feldspar, the formation mechanism of the microtextures in feldspar had not been studied well. In this study, we classified the exsolution textures in term of character of exsolution lamellae occurrence. Furthermore, the orientations of interfaces between each exsolution lamellae were determined using EBSD and the microtextures in feldspar were observed using TEM. We revealed a formation process of the typical textures in ternary feldspars and gave some constraint to the cooling process of the felsic gneiss.

【目的】超高温変成岩である東南極大陸 Napier 岩体, Riiser Larsen 山に産する片麻岩中の ternary feldspar の微細組織について

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図1. Riiser Larsen 山の片麻岩に見られるternary feldspar の BSE 像. Oligoclase (暗) と orthoclase (明)からなる離溶組織を示す.